

Figures 9 to 9i demonstrate different methods of attachment between the valve and stent according to the present invention;

Figure 10 illustrates a dipping mandrel with an extra portion, which improves the sealing ability of the valve, according to the present invention;

5 Figures 11a to 11c illustrate a valve mounted on a stent with an extra support, which improves the force distribution on the valve material and facilitates prolonged durability of the valve, according to the present invention;

10 Figures 12a to 12c depict a valve with rigid supports according to the present invention, located substantially in the center of its leaflets. This design allows the valve leafs to perform without outer support;

Figures 13a to 13c illustrate the manufacturing of a reinforced PU tube composed of strong fiber from PU, PET or other and a softer PU coating, for serving as the supporting structure;

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15 Figures 14a to 14c demonstrate incorporation of heavy metal markers on the stent, according to the present invention. These markers allow orientation control while positioning the device at the required location;

Figures 15a to 15c demonstrate a valve with radio-opaque coating, according to the present invention, which allows imaging of the valve motion under angiogram;

20 Figures 16a to 16c illustrate a procedure, which helps in accurate positioning the valve device with respect to the longitudinal orientation;

25 Figures 17a and 17b describe a valve device according to the present invention, comprising one valve assembly mounted on a stent and an additional portion with a stent only. This allows placing the device in a way that coronaries are not blocked, longitudinal positioning thus becomes less sensitive and the extra stent decreases the risk of device migration within the vasculature;